Luccarini, S., 937
Macdonald, D. W., 655
MacNeil, M. D., 495
Magle, S., 524
Magnan-Neto, J. A., 902
Magnusson, W. E., 677
Malcolm, J. R., 982
Manning, R. W., 887
Mares, M. A., 147
Marquet, P. A., 191
Marsh, B. D., 1210
Martin, G. M., 793
Martin, R. A., 475
Martin, T. J., 314
Masters, D. V., 1205
Masters, R. E., 46
Matson, C. W., 1075
Mayer, P. M., 1144
McCracken, G. F., 67
McDonald, J. E., Jr., 1022
McGuire, B., 561, 647
McKenzie, J., 1237
McKnight, M. L., 826
McMillan, B. R., 670
McWilliams, L. A., 599
Melin, A. D., 1042
Mena V., P., 457
Méndez-Harclerode, F. M., 180
Merritt, J. F., 39
Meyer, C. F. J., 587
Meyer, M. D., 275
Meynard, A. P., 191
Michener, G. R., 323
Milazzo, M. L., 180
Mildenstein, T. L., 719
Miller-Butterworth, C. M., 1121
Milne, D. J., 909
Mitchell, M. S., 1029
Montuire, S., 773
Moorhouse, T. P., 655
Morales, J. C., 353
Morejohn, G. V., 115
Morisaka, T., 541
Morton, D., 1210
Morton, P. K., 147
Muchhala, N., 457
Mullins, T. D., 201
Murphy, S., 1247
Nakahara, F., 541
Nathan, P. T., 281
Nelson, S. L., 1205
Neubaum, D. J., 95
Neubaum, M. A., 95
Nice, C. C., 887
North, M. P., 275
Nutt, K. J., 961
O'Connell, M. A., 77
O'Shea, T. J., 95
Oddy, D. M., 520
Okamura, H., 1227
Oli, M. K., 561, 647
Orrock, J. L., 569, 662
Ostfeld, R. S., 991
Ozgul, A., 647
Page, B., 1237
Palma, R. E., 191
Pardiñas, U. F. J., 191, 462
Parker, K. L., 610
Parry, L. J., 1237
Patton, J. C., 495
Pavey, C. R., 909
Pearse, D. E., 531
Peláez-Campomanes, P., 475
Percequillo, A. R., 873
Peris, A., 1178
Pillay, N., 99
Polischuk Blum, S., 160
Powell, R. A., 1171
Quesseveur, E., 997
Rainey, I., 909
Rancourt, S. J., 77
Rasmussen, K. J., 342
Reeb, D., 131
Reeder, D. M., 225
Rehmeier, R. L., 670
Reichman, O. J., 750
Reilly, S. M., 887
Rhodes, O. E., Jr., 782
Rickart, E. A., 415
Riddle, B. R., 366
Rinaldi, C. E., 323
Ritzi, C. M., 713
Rivera-Milla, E., 191
Rocha-Barbosa, O., 902
Rogan, E., 1247
Rogers, D. S., 531, 1085
Rogers, W. E., 750
Romañach, S. S., 750
Romero-Almaraz, M. L., 866
Rosenberry, C. S., 623
Rossiter, S., 61
Ruan, X.-D., 881
Ruczyński, I., 921
Ruedas, L. A., 353
Rule, M. I., 77
Russell, A. P., 1042
Ruthven, D. C., III, 180
Sacks, B. N., 1036
Salazar-Bravo, J., 191
Samjaa, R., 1059
Sánchez-Hernández, C., 866
Santori, R. T., 902
Saveljev, A. P., 1059
Schauber, E. M., 991
Schauster, E. R., 547
Schmidly, D. J., 449
Schnell, G. D., 866
Schoeman, M. C., 1121
Schradin, C., 99, 757
Seabloom, E. W., 750
Serrouya, R., 736
Shinohara, M., 541
Shipp-Pennock, M. A., 803
Shurtliff, Q. R., 531
Sicard, B., 997
Silva, M. J. de J., 873
Silvy, N. J., 29
Simonetti, J. A., 969
Smith, K. K., 333
Solomon, N. G., 555
Sparks, D. W., 713
Speck, S., 745
Spotorno, A. E., 191
Spradling, T. A., 1095
Sripathi, K., 281
Steele, M. A., 39
Stephen, C. L., 782
Stephenson, T. R., 610
Stier, S. C., 719
Strickland, B. K., 56
Strobeck, C., 160
Stubbe, A., 1059
Stubbe, M., 1059
Suarez, P., 462
Suazo, A. A., 520
Sunquist, M., 429
Swihart, R. K., 22
Tamayo, B., 689
Tejedor, A., 1109
Tena, L., 1178
Tewes, M. E., 29
Tomasik, E., 386
Torre, I., 1178
Torres-Pérez, F., 191
Trillmich, R., 763
Trites, A. W., 704
Trudeau, C., 514
Trujillo, R. G., 1075
Ulevičius, A., 1059
Urrejola, D., 302
Valdivia, N., 1009
Van Den Bussche, R. A., 147, 1136
van Nievelt, A. F. H., 333
Vance, V. L., 1085
Vásquez, R. A., 969
Vieira, M. V., 287, 902
Voigt, C. C., 745
Voss, R. S., 853
Vouetel, V., 139
Wallingford, B. D., 623
Wan, Q.-H., 397, 881
Wasserberg, G., 1009
Webb, R. E., 46
Webster, W. D., 803
Weckerly, F. W., 630
Weigl, P. D., 841
Weinbeer, M., 587
Wemmer, C., 429
Weyandt, S. E., 1136
Whitaker, J. O., Jr., 713
Whittaker, J. C., 294
Wickliffe, J. K., 1075
Wieczorek, J. R., 302
Wiig, Ø., 895
Willis, C. K. R., 85
Wilson, J. A., 265
Wingfield, J. C., 248
Winkelmann, J. R., 931
Winterrowd, M. F., 841
Wu, H., 397
Wu, Y., 953
Xie, J., 833
Yates, T. L., 191
Zegers, D. A., 39
Zhang, J.-L., 881
Zhang, L., 61
Zhang, S., 61
Zhang, Z., 833
Zhu, J., 524
Zimmerman, B. L., 982

SUBJECTS

(New names in *italic* type)

A
Abert's squirrels, 1220
Abundance:
  Mastomys huberti, 997
  Peromyscus (2 spp.), 662
  Sigmodon hispidus, 670
Academic programs, 449
Acerodon jubatus, 719
Acorns:
  availability effect on black bears, 1022
  predation effect on oak regeneration, 1015
Activity patterns:
  Blarina carolinensis, 294
  central Appalachian bats, 1210
  Cynomys (2 spp.), 15
  Sciurus nayaritensis chiricahuae, 947
  Spalacopus cyanus, 302
  Spermophilus parryii, 314
  Spermophilus xanthoprymnus, 7
  temporal patterns in Australian bats, 909
Africa:
  Ctenodactylus gundi, 961
  Helogale parvula, 255
  Lycaon pictus, 255
  Mastomys huberti, 997
  Miniopterus (6 spp.), 1121
  Otomys unisulcatus, 757
  Rhabdomys pumilio, 99, 757
African striped mouse, 99
African wild dog, 255
Age at maturity:
  Cavia magna, 763
Age classes, dental, 333
Aggression, in social carnivores, 255
Ailuropoda melanoleuca qinlingensis, 397
Ailurops ursinus, 353
Akaike information criterion (AIC), 85
Akodon:
  azarae, 462
  lindberghi, 462
  montensis, 462
  mystax, 462
  philipmyersi, 462
  sanctipaulensis, 462
Alarm call:
  Cynomys ludovicianus, 524
  Ochotona princeps, 974
Alaska:
  Balaena mysticetus, 342
  Callorhinus ursinus, 1227
  Eumetopias jubatus, 1075
  Rangifer tarandus, 506
Alaskan barren ground caribou, 495
Allenby's gerbil, 1009
Allometry:
  Ovibus moschatus, 121
  Rangifer tarandus, 121
Allostasis, 248
Amazonia:
  Neusticomys ferreirai, 873
  variation in small mammal species richness by trap height and trap type, 982
Ambient noise:
  effect on whistles by Tursiops aduncus, 541
Amelogenin, 160
American marten, 1156
American Samoa:
  Pteropus tonganus, 1205
Amino-acid supplementation, for Sigmodon hispidus, 46
AnaBat, 909
Anastasia beach mouse, 520
Anatolian ground squirrels, 7
Animal-plant interactions, Apodemus sylvaticus and, 576
Animal welfare, trapping of Ursus americanus, 1171
Anoura:
  caudifer, 457
  cultrata, 457
  fistulata, 457
  geoffroyi, 457
Antilocapra americana sonoriensis, 782
Antler:
  Bretzia, 115
Apodemus sylvaticus, 576, 1178
Aransas National Wildlife Refuge:
  Blarina, 887
Arborimus, 201
Arctic ground squirrel, 236, 314
Arctic lemmings, 380
Arctocephalus forsteri, 1237
Argentina:
  Akodon philipmyersi, 462
  Lestodelphys halli, 793
  Oligoryzomys longicaudatus, 191
Arizona:
  Antilocapra americana sonoriensis, 782
  Sciurus aberti, 1220
  Sciurus nayaritensis chiricahuae, 947
  Tamiasciurus hudsonicus grahamensis, 309
Arkansas:
  Corynorhinus townsendii ingens, 1136
Arvicola terrestris, 655
Asia. *See also* Southeast Asia; *specific countries*
  Castor fiber, 1059
  Eumetopias jubatus, 1075
  Manis (2 spp.), 1068
Asiatic golden cat, 29
Atlantic Rainforest habitat:
  Didelphis aurita, 287
Australia:
  Arctocephalus forsteri, 1237
  bats (24 spp.), 909
  Dasycercus cristicauda, 689
  El Niño effects, 689
  Ningaui ridei, 689
  Setonix brachyurus, 683
  Sminthopsis (2 spp.), 689

B
Bacteria and bat smell, 745
Balaena mysticetus, 342
Balaenopteridae, 139
Barro Colorado Nature Monument:
  Macrophyllum macrophyllum, 587
Bathyergidae:
  Cryptomys hottentotus natalensis, 1
Bats:
  Acerodon jubatus, 719
  Anoura (4 spp.), 457
  Corynorhinus rafinesquii, 729
  Corynorhinus townsendii ingens, 1136
  Cynopterus sphinx, 281
  Eptesicus fuscus, 95, 729, 1193, 1210
  Eumops perotis, 1193
  Lasiurus borealis, 1210
  Lasiurus cinereus, 85
  Macrophyllum macrophyllum, 587
  Melonycteris melanops, 931
  Miniopterus (13 spp.), 1121
  Myotis (4 spp.), 1193, 1210
  Myotis evotis, 77
  Myotis sodalis, 713
  Natalus (2 spp.), 1109
  Nyctalus (2 spp.), 921
  Nyctinomops macrotis, 1193
  Pipistrellus subflavus, 729, 1210
  Pteropus tonganus, 1205
  Pteropus vampyrus lanensis, 719
  Saccopteryx bilineata, 745
  Sturnira (4 spp.), 866
  Tadarida brasiliensis, 67, 1193
  Tadarida brasiliensis mexicana, 599
  temporal patterns in Australian bats, 909
  Tylonycteris (2 spp.), 61
  Xeronycteris vieirai, 403
Beach mouse, 520
Bears:
  Ursus (3 spp.), 160
  Ursus americanus, 1022, 1029, 1171
  Ursus maritimus, 895
Beaver, 1059
Behavior:
  Cynomys ludovicianus response to repeated human intrusion, 524
  Lutreolina crassicaudata locomotion, 902
  Sciurus nayaritensis chiricahuae, 947
  wind effect on Ochotona princeps, 974
Bias, trap-capture studies, 606
Big brown bat, 95, 729, 1210
Biodiversity:
  variation in small mammal species richness by trap height and trap type, 982
Biogeography:
  Chrotomys (5 spp.), 415
  Gulo gulo, 386
  Heteromyidae, 366
  Oligoryzomys longicaudatus, 191
  Perognathus (3 spp.), 826
  Peromyscus slevini, 814
  Phalangeridae, 353
  Thylamys (7 spp.), 147
Birth mass:
  Rangifer tarandus, 506
Black bear, 160, 1022, 1029
Black-bellied fruit bat, 931
Black-eared opossum, 287
Black-tailed prairie dogs, 15, 524
Blarina:
  brevicauda, 606, 887
  carolinensis, 294, 887
  hylophaga, 887
Body condition, in Canis latrans, 1036
Body mass:
  Erethizon dorsatum, 514
  Odocoileus virginianus, 56

Peromyscus (2 spp.), 520
Rangifer tarandus, 506
Spermophilus xanthoprymnus, 7
Tamiasciurus hudsonicus grahamensis, 309
Ursus maritimus, 895
Body size:
Rattus norvegicus, 1042
Body temperature:
Spermophilus parryii, 314
Bolivia:
Sturnira (4 spp.), 866
Bolomys lasiurus, 677
Borrowing patterns:
Geomys (2 spp.), 750
Thomomys bottae, 750
Botfly parasitism, 39
Bottom-up effects, 689
Bowhead whale, 343
Brazil:
Bolomys lasiurus, 677
Callithrix (6 spp.), 773
Didelphis aurita, 287
Leontopithecus chrysomelas, 773
Lutreolina crassicaudata, 902
Neusticomys ferreirai, 873
Xeronycteris vieirai, 403
Brazilian free-tailed bats, 67
Breeding:
Canis latrans, 1036
Cavia magna, 763
Breeding aggregation, by Callorhinus ursinus, 1227
Breeding behavior, of Microtus oeconomus, 953
Bretzia, 115
Bridges, as day-roosting sites, 729
British Columbia:
Odocoileus hemionus hemionus, 736
Brown bear, 160
Bush karoo rats, 757

C

Cache pilfering:
Dipodomys (2 spp.), 265
Cache size:
Dipodomys ordii, 1186
Calcium block use, by Pteropus tonganus, 1201
California:
Canis latrans, 1036
Cervus elaphus roosevelti, 630
Dipodomys (2 spp.), 265
Glaucomys sabrinus, 275
Callithrix:
argentata, 774
humeralifer, 774
jacchus, 774
mauesi, 774
penicillata, 774
pygmaea, 774
Callorhinus ursinus, 1227
Canada:
Erethizon dorsatum, 514
Lasiurus cinereus, 85
Martes americana atrata, 1156
Odocoileus hemionus hemionus, 736
Ursus maritimus, 160
Canadian barren ground caribou, 495
Canis:
latrans, 1036
lupus, 255
Canopy trapping:
variation in small mammal species richness by trap height and trap type, 982
Canyon mouse, 531
Capture-recapture studies:
Arvicola terrestris, 655
Dipodomys (2 spp.), 265
Erethizon dorsatum, 514
Mastomys huberti, 997
Peromyscus (2 spp.), 520
Caribou, 121, 495, 506, 610
Carnivores:
dominance, aggression, and glucocorticoid levels in social, 255
Carpal bones:
Bretzia, 115
Castor fiber, 1059
Catopuma temminckii, 29
Cavia magna, 763
Celaenomys, 415
Centrifugal community organization:
Gerbillus (2 spp.), 1009
Cervidae:
Bretzia, 115
Cervus elaphus roosevelti, 630
Cetaceans:
Balaena mysticetus, 342
balaenopterids, 139
Delphinus delphis, 1247
Eubalaena australis, 131
Tursiops aduncus, 541
Cetotheriidae, 139
Cetotherium rathkei, 139
Chaetodipus, 366
Chile:
Octodon (2 spp.), 969
Oligoryzomys longicaudatus, 191
Phyllotis darwini, 969
Spalacopus cyanus, 302
Thylamys elegans, 969
China:
Ailuropoda melanoleuca qinlingensis, 397
Cricetulus triton, 833
Microtus oeconomus, 953
Pantholops hodgsonii, 881
Tylonycteris (2 spp.), 61
Chipmunk, eastern, 39
Chiroptera:
Anoura (4 spp.), 457
Eptesicus fuscus, 95, 729, 1193, 1210
Lasiurus borealis, 1210
Lasiurus cinereus, 85
Macrophyllum macrophyllum, 587
Miniopterus (13 spp.), 1121
Myotis (4 spp.), 1193, 1210
Myotis evotis, 77
Myotis sodalis, 713
Nyctalus (2 spp.), 921
Pipistrellus subflavus, 729, 1210
Sturnira (4 spp.), 866
Tadarida brasiliensis mexicana, 599
Xeronycteris vieirai, 403
Chiru, 881
Chromosomes:
Cratogeomys (3 spp.), 1095
Chrotomys:
gonzalesi, 415
sibuyanensis, 415
silaceus, 415
whiteheadi, 415
whiteheadi mindorensis, 415
Circadian activity:
dentin increments, 323
Spalacopus cyanus, 302
Clethrionomys gapperi, 606
Climbing:
Lutreolina crassicaudata, 902
tree diameter effect on climbing ability of small animals, 969
Clouded leopard, 29
Cloud forest:
Anoura fistulata, 457
Coefficient of relatedness, 841
Coevolution:
Apodemus sylvaticus, 576
Saccopteryx bilineata, 745
Colilargo, 191
Collared lemmings, 380
Colorado:
Eptesicus fuscus, 95
Vulpes velox, 547
Communication signals:
Cynomys ludovicianus, 524
Saccopteryx bilineata, 745
Tursiops aduncus, 541
Community structure:
eastern red cedar invasion of Great Plains landscape and effect on small mammals, 1144
Comparative metrics, 1042
Complementary habitat use, 630
Compositional analysis, 713
Connectivity:
Peromyscus polionotus, 569
Conservation:
Akodon (6 spp.), 462
Antilocapra americana sonoriensis, 782
Balaena mysticetus, 342
Castor fiber, 1059
Myotis sodalis, 713
sympatric felids in Thailand, 29
Control region gene sequences:
Ctenomys (20 spp.), 170
Gulo gulo, 386
Pantholops hodgsonii, 881
Convective cooling, energetic implications of, 85
Cooperative breeding:
Ctenodactylus gundi, 961
in social carnivores, 255
Core-use area:
Melonycteris melanops, 931
Corridors:
Peromyscus (2 spp.), 662
Peromyscus polionotus, 569
Corticosterone, 225
Cortisol, 225
Corynorhinus:
rafinesquii, 729
townsendii ingens, 1136
Cotton mouse, 662
Cotton rat, 46, 475, 670, 1144
Coyotes, 1036
Cratogeomys:
fulvescens, 1095
merriami, 1095
perotensis, 1095
Creatine kinase, in Ursus americanus, 1171
Cricetulus triton, 833
Cross-timbers forest plant community:
eastern red cedar invasion of Great Plains landscape and effect on small mammals, 1144
Cryptic species:
Cratogeomys (3 spp.), 1095
Cryptomys hottentotus natalensis, 1
Ctenodactylus gundi, 961
Cururos, 302
Cuscus, 353
Cuterebra parasitism, 39
Cyamid fauna, of right whales, 131
Cynomys:
ludovicianus, 15, 524
parvidens, 15
Cynopterus sphinx, 281

Cytochrome-*b* gene sequences:
Akodon (6 spp.), 462
Blarina (3 spp.), 887
Chrotomys (5 spp.), 415
Ctenomys (20 spp.), 170
Gulo gulo, 386
Heteromyidae, 366
Liomys (5 spp.), 1085
Miniopterus (13 spp.), 1121
Oligoryzomys longicaudatus, 191
Perognathus (3 spp.), 826
Phenacomys (5 spp.), 201
Rangifer tarandus, 495
Thylamys (7 spp.), 147

D
Daily activity:
Spalacopus cyanus, 302
Dama dama, 937
Dasycercus:
cristicauda, 689
Deciduous forest habitat:
Tamiasciurus hudsonicus, 22
Deer:
Odocoileus hemionus hemionus, 736
Odocoileus virginianus, 56, 623, 1015
Deer mouse, 39, 606, 1144
Delphinus delphis, 1247
Demography:
Microtus (2 spp.), 561
Ursus americanus, 1029
Denning:
Microtus ochrogaster, 555
Vulpes velox, 547
Dental increment growth:
Spermophilus (3 spp.), 323
Dentin matrix protein 1 gene *(Dmp1)*, 853
Dentition:
Lestodelphys halli, 793
Monodelphis domestica, 333
Desert mouse, 689
Dicrostonyx:
groenlandicus, 380
torquatus, 380
Didelphidae, 333
Hyladelphys, 853
Lutreolina crassicaudata, 902
Didelphis aurita, 287
Diet:
Acerodon jubatus, 719
analysis from fecal samples, 704
Pteropus vampyrus lanensis, 719
Rangifer tarandus, 610
Tadarida brasiliensis, 67
Tadarida brasiliensis mexicana, 599
Tylonycteris (2 spp.), 61
Ursus americanus, 1022
Digestible energy requirements:
Odocoileus virginianus, 56
Dipodomys:
ordii, 1186
phylogenetics, 366
simulans, 265
stephensi, 265
Discrete morphological characters:
Manis culionensis, 1068
Discriminant function analysis, 841
Disease, effect on Mephitis mephitis survival, 1164
Dispersal:
Corynorhinus townsendii ingens, 1136
Ctenodactylus gundi, 961
Odocoileus virginianus, 623
Vulpes velox, 547
Dissimilarity matrices, 773
Distribution:
Chrotomys (5 spp.), 415
Diurnal activity:
Spalacopus cyanus, 302
Diversification:
Ctenomys (20 spp.), 170
D-loop gene sequences:
Cricetulus triton, 833
Neotoma micropus, 180
Peromycus leucopus, 803
Dolphin:
common, 1247
Indo-Pacific bottlenose, 541
Dominance, in social carnivores, 255
Drey site selection by Abert's squirrels, 1220
Dulzura kangaroo rats, 265
Dunnart:
fat-tailed, 236
hairy-footed, 689
lesser hairy-footed, 689
Dwarf mongoose, 255

E
Eastern chipmunk, 39
Eastern pipistrelles, 729, 1210
Eastern red cedar, invasion of Great Plains landscape and effect on small mammals, 1144
Eastern small-footed bat, 1210
Eastern woodrat, 1144
Ecdysis, in southern right whales, 131
Echolocation:
Miniopterus (2 spp.), 1121
use of spatial features by foraging insectivorous bats, 1193
Ecological gradients:
Gerbillus (2 spp.), 1009
Ecology:
stress in free-ranging mammals, 225
sympatric felids in Thailand, 29
Ecuador:
Anoura fistulata, 457
Elevation, torpor patterns across gradients of, 15
Elk, 630
Elliot's short-tailed shrew, 887
El Niño Southern Oscillation (ENSO), 265, 689
Emigration:
Odocoileus virginianus, 623
Enamel, 323
Endangered species:
Dipodomys stephensi, 265
Gulo gulo, 386
Tamiasciurus hudsonicus grahamensis, 309
Energetics:
Erethizon dorsatum, 514
Geomys (2 spp.), 750
Rangifer tarandus, 610
Tamiasciurus hudsonicus grahamensis, 309
Thomomys bottae, 750
Entanglement:
Balaena mysticetus, 342
Environment, coping with capricious, 248
Eptesicus fuscus, 95, 729, 1193, 1210
Erethizon dorsatum, 514
Eubalaena australis, 131
Eumetopias jubatus, 704, 1075
Eumops perotis, 1193
Europe:
Apodemus sylvaticus, 576, 1178
Castor fiber, 1059
Dama dama, 937
Genetta genetta, 1178
Nyctalus (2 spp.), 921
Evolutionary history:
Pantholops hodgsonii, 881
Evolutionary relationships:
Phalangeridae, 353
Exotic species, Abert's squirrels in Arizona, 1220

F
Fallow deer, 937
Fat storage:
Erethizon dorsatum, 514
Fat-tailed dunnart, 236
Fecal analysis:
Acerodon jubatus, 719
dietary analysis from, 704
Pteropus vampyrus lanensis, 719
Tadarida brasiliensis mexicana, 599
Fecundity:
Canis latrans, 1036
Feeding behavior:
balaenopterids, 139
Feeding morphology:
Balaena mysticetus, 342
Felids:
Catopuma temminckii, 29
Neofelis nebulosa, 29
Pardofelis marmorata, 29
Female pseudohermaphrodites, polar bear, 160
Fertility:
Ursus americanus, 1029
Fire response:
Bolomys lasiurus, 677
La Niña effects in central Australia, 689
Setonix brachyurus, 683
Sigmodon hispidus, 670
Flat-headed bats, 61
Flooding:
Mastomys huberti population dynamics, 997
Florida:
Peromyscus (2 spp.), 520
Flying foxes, 719
Flying squirrel, 275, 841
Food availability:
Bolomys lasiurus, 677
Microtus (2 spp.), 647
Food caches:
Dipodomys (2 spp.), 265
Dipodomys ordii, 1186
Food habits:
Acerodon jubatus, 719
Pteropus vampyrus lanensis, 719
Tadarida brasiliensis, 67
Tadarida brasiliensis mexicana, 599
Food hoarding:
Tamiasciurus hudsonicus, 108
Food resources:
Dipodomys (2 spp.), 265
Food supplementation:
Microtus (2 spp.), 647
Sigmodon hispidus, 46
Foraging:
Acerodon jubatus, 719
Apodemus sylvaticus, 576, 1178
Cervus elaphus roosevelti, 630
Geomys (2 spp.), 750
Gerbillus (2 spp.), 1009
Myotis sodalis, 713
Peromyscus (2 spp.), 662
Peromyscus polionotus, 569
Pteropus vampyrus lanensis, 719
Thomomys bottae, 750
use of spatial features by foraging insectivorous bats, 1193
Forest, primeval:
Nyctalus (2 spp.), 921
Forest cover:
Odocoileus virginianus, 623

Fossil species:
Bretzia, 115
Sigmodon (8 spp.), 475
Fragmentation, of Odocoileus virginianus population, 623
Frequency of occurrence, 704
Frugivory:
Apodemus sylvaticus, 576
Pteropus tonganus, 1205
Fruit bat, 719, 931, 1205
Fulvous harvest mouse, 1144
Funnel-eared bat, 1109
Fur seal:
New Zealand, 1237
northern, 1227

G
Gene flow:
Cricetulus triton, 833
lemmings, 380
Pantholops hodgsonii, 881
Rangifer tarandus, 495
Genetic diversity:
Castor fiber, 1059
Eumetopias jubatus, 1075
Miniopterus (13 spp.), 1121
Neotoma micropus, 180
Pantholops hodgsonii, 881
Genetic structure:
Gulo gulo, 386
Genetic variation:
Corynorhinus townsendii ingens, 1136
Cricetulus triton, 833
lemmings, 380
Pantholops hodgsonii, 881
Perognathus (3 spp.), 826
Genetta genetta, 1178
Geographical variation:
Tursiops aduncus, 541
Tylonycteris (2 spp.), 61
Ursus maritimus, 895
Geographic structure:
Corynorhinus townsendii ingens, 1136
Geomyidae, 750
Geomys:
attwateri, 750
bursarius, 750
Gerbil, 1009
Gerbillus:
andersoni allenbyi, 1009
pyramidium, 1009
Giant panda, 397
Giant Philippine fruit bat, 719
Glaucomys:
sabrinus, 275
volans, 841
Global positioning system radiotelemetry, 736
Glossophagine:
Anoura fistulata, 457
Glucocorticoids, 225, 236, 248, 255
Golden-crowned flying fox, 719
Gonadal development, in Delphinus delphis, 1247
Gray short-tailed opossum, 333
Gray wolf, 255
Greater Egyptian sand gerbil, 1009
Greater long-tailed hamster, 833
Greater sac-winged bat, 745
Ground squirrels:
Anatolian, 7
arctic, 236, 314, 323
Richardson's, 323
Wyoming, 323
Group formation:
Vulpes velox, 547
Group nesting, 841
Growth:
Ovibus moschatus, 121
Rangifer tarandus, 121
Rattus norvegicus, 1042
Growth rates:
Cavia magna, 763
Gulo gulo, 386
Gundis, 961

H
Habitat:
adaptation of stress axis in males and, 236
El Niño Southern Oscillation (ENSO) and, 265
Geomys (2 spp.), 750
Microtus (2 spp.), 561
Thomomys bottae, 750
Habitat fragmentation:
Peromyscus (2 spp.), 662
Habitat quality:
Microtus ochrogaster, 555
Habitat selection:
Cervus elaphus roosevelti, 630
Gerbillus (2 spp.), 1009
Myotis evotis, 77
Habitat structure:
Bolomys lasiurus, 677
Habitat suitability:
Bolomys lasiurus, 677
Habitat use:
Cervus elaphus roosevelti, 630
Didelphis aurita, 287
Glaucomys sabrinus, 275
Martes americana atrata, 1156
Myotis sodalis, 713
Odocoileus hemionus hemionus, 736
Setonix brachyurus, 683
Tamiasciurus hudsonicus, 22
tree diameter effect on climbing ability of small animals, 969
use of spatial features by foraging insectivorous bats, 1193
Habituation:
Cynomys ludovicianus, 524
Hairy-footed dunnart, 689
Hamster, 833
Hares:
Lepus americanus, 240, 1156
Harvest mouse, 1144
Heather voles, 201
Helogale parvula, 255
Herbivore:
Erethizon dorsatum, 514
Ovibos moschatus, 121
Rangifer tarandus, 121
Herds:
Rangifer tarandus, 495
Herpetocetus sendaicus, 139
Heteromyidae, 366
Heteromys, 366, 1085
Hibernation:
Cynomys (2 spp.), 15
Spermophilus (3 spp.), 323
Spermophilus xanthoprymnus, 7
Higher education, 449
Hispid cotton rat, 46, 670, 1144
Historical biogeography:
Gulo gulo, 386
Heteromyidae, 366
Hoary bats, 85
Home range:
Arvicola terrestris, 655
Didelphis aurita, 287
Geomys (2 spp.), 750
Macrophyllum macrophyllum, 587
Martes americana atrata, 1156
Melonycteris melanops, 931
Microtus (2 spp.), 647
Odocoileus hemionus hemionus, 736
Rhabdomys pumilio, 99
Setonix brachyurus, 683
Tamiasciurus hudsonicus, 22
Thomomys bottae, 750
Vulpes velox, 547
House mouse, 689
Human disturbance, of fallow deer populations, 937
Hyladelphys, 853
Hypothalamic-pituitary-adrenal (HPA) axis, 225, 236

I
Ichthyomyini:
Neusticomys (5 spp.), 873
Idaho:
Bretzia, 115
Ochotona princeps, 974
Illinois:
Blarina carolinensis, 294
Mephitis mephitis, 1164
Microtus (2 spp.), 561
Odocoileus virginianus, 1015
Peromyscus leucopus, 1015
Sciurus (2 spp.), 1015
India:
Cynopterus sphinx, 281
Indiana:
Myotis sodalis, 713
Tamiasciurus hudsonicus, 22
Indiana bat, 713, 1210
Indian short-nosed fruit bat, 281
Indirect competition, in Dama dama, 937
Indo-Pacific bottlenose dolphin, 541
Infant abuse and infanticide, by Callorhinus ursinus, 1227
Insectivory:
Tadarida brasiliensis, 67
use of spatial features by foraging insectivorous bats, 1193
Intergenerational effects:
Rangifer tarandus, 506
Intermediate disturbance hypothesis, 997
Interphotoreceptor retinoid-binding protein *(Irbp)*, 853
Interspecific competition:
Otomys unisulcatus and Rhabdomys pumilio, 757
Intraspecific variation:
Lestodelphys halli, 793
Rhabdomys pumilio, 99
Intron gene sequences:
Ctenomys (20 spp.), 170
Invasion, of eastern red cedar in Great Plains landscape and effect on small mammals, 1144
Irbp (interphotoreceptor retinoid-binding protein), 853
Isarog striped shrew-rat, 415
Israel:
Gerbillus (2 spp.), 1009
Italy:
Dama dama, 937
Iteroparity, 236

J
Jaliscan spiny pocket mouse, 1085
Japan:
Tursiops aduncus, 541

Juniperus virginiana, invasion of Great Plains landscape and effect on small mammals, 1144

K
Kangaroo rat:
  Dulzura, 265
  Ord's, 1186
  Stephen's, 265
Kansas:
  Sigmodon (8 spp.), 475
  Sigmodon hispidus, 670
Key, to Cratogeomys (7 spp.), 1095

L
Lactate dehydrogenase, in Ursus americanus, 1171
Lactation:
  Rangifer tarandus, 506
Landscape:
  Odocoileus virginianus, 623
Landscape pattern indices, 736
La Niña, 689
Larder hoarding:
  Tamiasciurus hudsonicus, 108
Lasiurus:
  borealis, 1210
  cinereus, 85
Leisler's bat, 922
Lemmus:
  lemmus, 380
  sibiricus, 380
  trimucronatus, 380
Leontopithecus chrysomelas, 773
Lepus americanus, 240, 1156
Lesser hairy-footed dunnart, 689
Lesser long-fingered bat, 1121
Lestodelphys halli, 793
Lichens, 610
Life history:
  Cavia magna, 763
  Ovibus moschatus, 121
  Rangifer tarandus, 121, 506
  stress axis in male animals, 236
  stress in free-ranging mammals, 225
Liomys, 366
  adspersus, 1085
  irroratus, 1085
  pictus, 1085
  salvani, 1085
  spectabilis, 1085
Lipid reserves, 121
Litter size:
  Canis latrans, 1036
Little brown bat, 1210
Livetrapping:
  Apodemus sylvaticus, 576
  Arvicola terrestris, 655
  bias, 606
  Blarina brevicauda, 606
  Blarina carolinensis, 294
  Bolomys lasiurus, 677
  Ctenodactylus gundi, 961
  Dipodomys (2 spp.), 265
  Gerbillus (2 spp.), 1009
  Martes americana atrata, 1156
  Mastomys huberti, 997
  Mephitis mephitis, 1164
  Microtus (2 spp.), 561, 647
  Microtus ochrogaster, 555
  Neusticomys (5 spp.), 873
  Otomys unisulcatus, 757
  Peromyscus (2 spp.), 520, 662
  Peromyscus crinitus, 531
  Peromyscus polionotus, 569
  Rhabdomys pumilio, 757
  Sigmodon hispidus, 670
  Spalacopus cyanus, 302
  Spermophilus parryii, 314
  Tamiasciurus hudsonicus grahamensis, 309
  Ursus americanus, 1029, 1171
  variation in small mammal species richness by trap height and trap type, 982
Locomotion:
  Lutreolina crassicaudata, 902
Lonchophyllini, 403
Long-eared myotis, 77
Long-fingered bat, 1121
Long-legged bats, 587
Long-tailed field mouse, 576
Long-tongued bat, 457
Louisiana:
  Corynorhinus rafinesquii, 729
  Eptesicus fuscus, 729
  Pipistrellus subflavus, 729
Lowland striped shrew-rat, 415
Lutreolina crassicaudata, 902
Luzon montane striped shrew-rat, 415
Lycaon pictus, 255

M
Macrophyllum macrophyllum, 587
Mali:
  Mastomys huberti, 997
Management:
  Antilocapra americana sonoriensis, 782
  Odocoileus hemionus hemionus, 736
Manis:
  culionensis, 1068
  javanica, 1068
Marbled cat, 29
Marine debris, 342
Mark-recapture studies:
  Arvicola terrestris, 655
  bias, 606
  Bolomys lasiurus, 677
  Ctenodactylus gundi, 961
  Cynopterus sphinx, 281
  Gerbillus (2 spp.), 1009
  Mastomys huberti, 997
  Peromyscus (2 spp.), 520, 662
  Ursus americanus, 1029
Marmosets, 773
Marsupials:
  Dasycercus cristicauda, 689
  Didelphis aurita, 287
  Hyladelphys, 853
  Lestodelphys halli, 793
  Lutreolina crassicaudata, 902
  Monodelphis domestica, 333
  Ningaui ridei, 689
  Phalangeridae, 353
  Phascogale calura, 236
  Setonix brachyurus, 683
  Sminthopsis (2 spp.), 689
  Sminthopsis crassicaudata, 242
  Thylamys elegans, 969
  variation in species richness by trap height and trap type, 982
Marten, 1156
Martes americana atrata, 1156
Massachusetts:
  Ursus americanus, 1022
Mass gain:
  Erethizon dorsatum, 514
Mass loss:
  Peromyscus (2 spp.), 520
Mastomys huberti, 997
Mate loss:
  Vulpes velox, 547
Maternal nutrition:
  Rangifer tarandus, 506
Maternity roost site:
  Myotis evotis, 77
Mating:
  Arvicola terrestris, 655
  Cavia magna, 763
  cooperative breeding in social carnivores, 255
  Cryptomys hottentotus natalensis, 1
  Cynopterus sphinx, 281
  Peromyscus crinitus, 531
  Saccopteryx bilineata, 745
  strategy in Delphinus delphis, 1247
  stress axis in male animals, 236
  Tamiasciurus hudsonicus grahamensis, 309
Mato Grosso:
  Neusticomys ferreirai, 873
Meade Basin, Sigmodon of, 475
Meadow vole, 236, 561, 647
Mediterranean habitats, mice distribution, 1178
Melonycteris melanops, 931
Mephitis mephitis, 1164
Mesopredator:
  Mephitis mephitis, 1164
Metapopulation:
  Setonix brachyurus, 683
Methionine supplementation, of Sigmodon hispidus, 46
Metopocetus durinasus, 139
Mexican fox squirrels, 947
Mexican free-tailed bat, 599
Mexican pocket gopher, 1095
Mexican spiny pocket mouse, 1085
Mexico:
  Antilocapra americana sonoriensis, 782
  Cratogeomys (3 spp.), 1095
  Eptesicus fuscus, 1193
  Eumops perotis, 1193
  Liomys (5 spp.), 1085
  Myotis (4 spp.), 1193
  Natalus (2 spp.), 1109
  Nyctinomops macrotis, 1193
  Perognathus (3 spp.), 826
  Peromyscus slevini, 814
  Tadarida brasiliensis, 1193
Microbes and bat smell, 745
Microchiroptera:
  temporal patterns in Australian bats, 909
Microclimate:
  bridges as day-roosting sites, 729
Microdipodops, 366
Microsatellite DNA studies:
  Antilocapra americana sonoriensis, 782
  Corynorhinus townsendii ingens, 1136
  Glaucomys volans, 841
  Miniopterus (13 spp.), 1121
  Peromyscus crinitus, 531
  Rangifer tarandus, 495
Microtus:
  ochrogaster, 555, 561, 647, 1144
  oeconomus, 953
  pennsylvanicus, 242, 561, 647
  pinetorum, 1144
Middens:
  Tamiasciurus hudsonicus, 108
Migration, by lemmings, 380
Milk composition:
  Ursus americanus, 1022
Minimum convex polygon, 287
Miniopterus:
  fraterculus, 1121
  natalensis, 1121
Mitochondrial DNA studies:
  Akodon (6 spp.), 462
  Antilocapra americana sonoriensis, 782

Blarina (3 spp.), 887
Castor fiber, 1059
Chrotomys (5 spp.), 415
Corynorhinus townsendii ingens, 1136
Cratogeomys (3 spp.), 1095
Cricetulus triton, 833
Eumetopias jubatus, 1075
Gulo gulo, 386
Heteromyidae, 366
lemmings, 380
Neotoma micropus, 180
Oligoryzomys longicaudatus, 191
Pantholops hodgsonii, 881
Perognathus (3 spp.), 826
Peromycus leucopus, 803
Phalangeridae, 353
Phenacomys (5 spp.), 201
Rangifer tarandus, 495
Mixocetus elysius, 139
Molecular sex test, 160
Molecular systematics:
Perognathus (3 spp.), 826
Phenacomys (5 spp.), 201
Mole-rat, 1
Mongoose, dwarf, 255
Monodelphis domestica, 333
Morphofunctional anatomy, of balaenopterids, 139
Morphology:
Balaena mysticetus, 342
Blarina (3 spp.), 887
Chrotomys (5 spp.), 415
Cratogeomys (3 spp.), 1095
Hyladelphys, 853
Manis (2 spp.), 1068
Miniopterus (2 spp.), 1121
Neusticomys (5 spp.), 873
Ursus maritimus, 895
Morphometrics:
Callithrix (6 spp.), 773
Cratogeomys (3 spp.), 1095
Leontopithecus chrysomelas, 773
Peromycus leucopus, 803
Rattus norvegicus, 1042
Sturnira (4 spp.), 866
Mortality patterns:
Mephitis mephitis, 1164
Mouse:
African striped, 99
Anastasia beach mouse, 520
canyon, 531
cotton, 662
deer 39, 606, 1144
desert, 689
fulvous harvest, 1144
house, 689
long-tailed field, 576
oldfield, 569, 662
plains harvest, 1144
sandy inland, 689
southeastern beach mouse, 520
spinifex hopping, 689
spiny pocket, 1085
striped, 757
white-footed, 39, 803, 991, 1015, 1144
wood, 1178
Mouse opossums, 147
Movement:
Didelphis aurita, 287
Macrophyllum macrophyllum, 587
Odocoileus hemionus hemionus, 736
Peromyscus (2 spp.), 662
Movement distance:
Microtus (2 spp.), 647
Mt. Graham red squirrel, 309, 1220
Mule deer, 736
Mulgara, 693
Multiple paternity:
Peromyscus crinitus, 531
Mus domesticus, 689
Muskox, 121
Myotis:
evotis, 77
leibii, 1210
lucifugus, 1210
septentrionalis, 1210
sodalis, 713, 1210
use of spatial features in foraging in an urban landscape, 1193

N
Nanocetus eremus, 139
Natal long-fingered bat, 1121
Natal mole-rat, 1
Natalus:
lanatus, 1109
stramineus, 1109
Natural history:
at American universities, 449
Monodelphis domestica, 333
stress in free-ranging mammals, 225
Naturalist, 449
Nebraska:
Dipodomys ordii, 1186
Nectarivore:
Anoura fistulata, 457
Neofelis nebulosa, 29
Neonates:
Eubalaena australis, 131
Neotoma:
floridana, 1144
micropus, 180
Neotropics:
Akodon (6 spp.), 462
Nests:
Glaucomys volans, 841
Nest-site competition:
Otomys unisulcatus, 757
Rhabdomys pumilio, 757
Nest-site selection:
Microtus ochrogaster, 555
Sciurus aberti, 1220
Nest trees:
Glaucomys sabrinus, 275
Neusticomys:
ferreirai, 873
mussoi, 873
oyapocki, 873
pervuiensis, 873
venezuelae, 873
Newfoundland:
Martes americana atrata, 1156
New Mexico:
Tadarida brasiliensis mexicana, 599
New World monkeys, 773
New York:
Peromyscus leucopus, 991
New Zealand fur seal, 1237
Ningaui ridei, 689
Noctule, 922
North America. *See also* Canada; Mexico; United States
Gulo gulo, 386
Perognathus (3 spp.), 826
Rangifer tarandus, 495
North Carolina:
Ursus americanus, 1029
Northern flying squirrels, 275
Northern fur seal, 1227
Northern long-eared bat, 1210
Northern short-tailed shrew, 606, 887
Norway rat, 1042
Notomys alexis, 689
Nuclear gene sequences:
Cratogeomys (3 spp.), 1095
Ctenomys (20 spp.), 170
Hyladelphys, 853
Nutritional ecology:
Rangifer tarandus, 610
Nyctalus:
leisleri, 921
noctula, 921
Nyctinomops macrotis, 1193

O
Oaks:
acorn predation, 1015
black bears and acorn availability, 1022
Ochotona princeps, 974
Octodon:
bridgesi, 969
degus, 969
Odocoileus:
hemionus hemionus, 736
virginianus, 56, 623, 1015
Ohio:
Microtus ochrogaster, 555
Oil pollution, 342
Oklahoma:
Corynorhinus townsendii ingens, 1136
eastern red cedar invasion of Great Plains landscape and effect on small mammals, 1144
Sigmodon hispidus, 46
Oldfield mouse, 569, 662
Old-field vegetation plant community:
eastern red cedar invasion of Great Plains landscape and effect on small mammals, 1144
Olfactory communication:
Saccopteryx bilineata, 745
Olfactory predator cue, 662
Oligoryzomys longicaudatus, 191
Opossum:
black-eared, 287
gray short-tailed, 333
Patagonian, 793
thick-tailed, 902
Ord's kangaroo rat, 1186
Otomys unisulcatus, 757
Ovibus moschatus, 121
Ovulation:
Cryptomys hottentotus natalensis, 1
Ozark big-eared bat, 1136

P
Painted spiny pocket mouse, 1085
Palawan pangolin, 1068
Panama:
Macrophyllum macrophyllum, 587
Panamanian spiny pocket mouse, 1085
Pangolin, 1068
Pantholops hodgsonii, 881
Papua New Guinea:
Melonycteris melanops, 931
Pardofelis marmorata, 29
Parentage analysis:
Peromyscus crinitus, 531
Patagonia:
Lestodelphys halli, 793
Patagonian opossum, 793
Patch selection:
Cervus elaphus roosevelti, 630
Peromyscus (2 spp.), 662
Patch shape:
Peromyscus polionotus, 569

Paternal care:
Rhabdomys pumilio, 99
Pennsylvania:
Peromyscus (2 spp.), 39
Tamias striatus, 39
Perognathus, 366
amplus, 826
inornatus, 826
longimembris, 826
Peromyscus:
crinitus, 531
gossypinus, 662
leucopus, 39, 803, 991, 1015, 1144
leucopus aridulus, 803
leucopus buxtoni, 803
leucopus easti, 803
leucopus leucopus, 803
leucopus noveboracensis, 803
maniculatus, 39, 606, 1144
polionotus, 569, 662
polionotus niveiventris, 520
polionotus phasma, 520
slevini, 814
Phalanger, 353
Phalangeridae, 353
Phascogale calura, 236
Phenacomys:
albipes, 201
intermedius, 201
longicaudus longicaudus, 201
longicaudus silvicola, 201
poma, 201
Philippine flying foxes, 719
Philippines:
Acerodon jubatus, 719
Chrotomys (5 spp.), 415
Pteropus vampyrus lanensis, 719
Philopatry:
Corynorhinus townsendii ingens, 1136
Ctenodactylus gundi, 961
Pholidota:
Manis (2 spp.), 1068
Phyllostomidae:
Macrophyllum macrophyllum, 587
Sturnira (4 spp.), 866
Phyllotis darwini, 969
Phylogenetics:
Akodon (6 spp.), 462
balaenopterids, 139
Blarina (3 spp.), 887
Callithrix (6 spp.), 773
Cricetulus triton, 833
Ctenomys (20 spp.), 170
Heteromyidae, 366
Hyladelphys, 853
Leontopithecus chrysomelas, 773
Liomys (5 spp.), 1085
Perognathus (3 spp.), 826
Phalangeridae, 353
Phenacomys (5 spp.), 201
Rangifer tarandus, 495
Thylamys (7 spp.), 147
Phylogeny:
Antilocapra americana sonoriensis, 782
balaenopterids, 139
Hyladelphys, 853
Miniopterus (13 spp.), 1121
Monodelphis domestica, 333
Perognathus (3 spp.), 826
Phalangeridae, 353
Phylogeography:
Antilocapra americana sonoriensis, 782
Castor fiber, 1059
Cricetulus triton, 833
Eumetopias jubatus, 1075
Gulo gulo, 386
Oligoryzomys longicaudatus, 191
Physiology:
roost selection and, 85
stress in free-ranging mammals, 225
Pika, 974
Pilfering:
Dipodomys (2 spp.), 265
Tamiasciurus hudsonicus, 108
Pinaleño Mountains, and Sciurus aberti, 1220
Pinnipeds:
Arctocephalus forsteri, 1237
Callorhinus ursinus, 1227
Eumetopias jubatus, 704, 1075
Pipistrellus subflavus, 729, 1210
Piscobalaena nana, 139
PIT (passive integrated transponder) tags, 95, 265, 302
Plains harvest mouse, 1144
Plant-animal interaction:
effects of scatter-hoarding by Dipodomys ordii, 1186
Platyrrhines, 773
Pleistocene:
Manis culionensis, 1068
Sigmodon, 475
Spermophilus elegans, 323
Pliocene:
Bretzia, 115
Sigmodon, 475
Pocket gopher:
foraging tunnels, 750
Mexican, 1095
Poland:
Nyctalus (2 spp.), 921
Polar bear, 160, 895
Polygyny:
Callorhinus ursinus, 1227
Cynopterus sphinx, 281
Population cycles, of lemmings, 380
Population density:
Arvicola terrestris, 655
Microtus ochrogaster, 555
Odocoileus virginianus, 623
Otomys unisulcatus, 757
Rhabdomys pumilio, 757
Population differentiation:
Rangifer tarandus, 495
Population dynamics:
Blarina carolinensis, 294
Bolomys lasiurus, 677
Canis latrans, 1036
Corynorhinus townsendii ingens, 1136
Mastomys huberti, 997
Sigmodon hispidus, 46
Ursus americanus, 1029
Population genetics:
Antilocapra americana sonoriensis, 782
Neotoma micropus, 180
Population growth rate:
Ursus americanus, 1029
Population structure:
Castor fiber, 1059
central Appalachian bats, 1210
Cricetulus triton, 833
Porcupines, 514
Postnatal growth:
Rattus norvegicus, 1042
Prairie dogs:
black-tailed, 15, 524
Utah, 15
Prairie voles, 555, 561, 647, 1144
Predation:
on acorns, 1015
Dama dama, 937
La Niña effects in central Australia, 689
Microtus oeconomus, 953
mouse foraging and predation risk, 1178
Nyctalus (2 spp.), 921
olfactory predator cues, 662
on Tamiasciurus hudsonicus, 22
Predator:
Blarina brevicauda, 606
Genetta genetta, 1178
Martes americana atrata, 1156
Mephitis mephitis, 1164
Peromyscus leucopus on gypsy moth, 991
Predator avoidance:
Ochotona princeps, 974
Preference trials, on Pteropus tonganus, 1186
Pregnancy rate:
Arctocephalus forsteri, 1237
Prey abundance:
for Martes americana atrata, 1156
Prey behavior:
Peromyscus (2 spp.), 662
Principle component analysis:
Sturnira (4 spp.), 866
Progesterone:
Arctocephalus forsteri, 1237
Cryptomys hottentotus natalensis, 1
Program MARK, 1029
Promiscuity, in Delphinus delphis, 1247
Pronghorn, 782
Protein conservation:
Rangifer tarandus, 610
Pseudohermaphrodites, polar bear, 160
Pseudomys:
desertor, 689
hermannsburgensis, 689
Pteropodidae:
Melonycteris melanops, 931
Pteropus:
tonganus, 1205
vampyrus lanensis, 719

Q
Quokka, 683

R
Radiotelemetry:
Arvicola terrestris, 655
Eptesicus fuscus, 95
Glaucomys sabrinus, 275
Lasiurus cinereus, 85
Macrophyllum macrophyllum, 587
Martes americana atrata, 1156
Melonycteris melanops, 931
Mephitis mephitis, 1164
Microtus ochrogaster, 555
Myotis evotis, 77
Myotis sodalis, 713
Nyctalus (2 spp.), 921
Odocoileus hemionus hemionus, 736
5% rule, 95
Setonix brachyurus, 683
Spalacopus cyanus, 302
Spermophilus parryii, 314
Vulpes velox, 547
Rafinesque's big-eared bat, 729
Rainfall:
La Niña effects in central Australia, 689
Mastomys huberti population dynamics, 997
Rainforest:
Melonycteris melanops, 931
Rangifer:
tarandus, 121, 495, 506, 610
tarandus caribou, 495
tarandus granti, 495
tarandus groenlandicus, 495

Rats:
bush karoo, 757
cotton, 46, 475, 670, 1174
eastern woodrat, 1144
Isarog striped shrew-rat, 415
lowland striped shrew-rat, 415
Luzon montane striped shrew-rat, 415
multimammate, 997
Norway, 1042
silver earth, 415
southern plains woodrat, 180
Rattus norvegicus, 1042
Red bat, 1210
Red squirrel, 22, 108, 236
Mt. Graham, 309, 1220
Red-tailed phascogale, 236
Red tree vole, 201
Reduced major-axis regression, 1042
Reindeer, 121
Reithrodontomys:
fulvescens, 1144
montanus, 1144
Repeated capture:
Peromyscus (2 spp.), 520
Reproduction:
Arctocephalus forsteri, 1237
Canis latrans, 1036
Ctenodactylus gundi, 961
Spermophilus xanthoprymnus, 7
Tamiasciurus hudsonicus grahamensis, 309
Reproduction cost:
stress axis in male animals, 236
Reproduction investment:
Rangifer tarandus, 506
Reproductive strategy:
Cavia magna, 763
Residence time, of botfly infested rodents, 39
Resource availability:
Didelphis aurita, 287
Resource partitioning:
Tylonycteris (2 spp.), 61
Resource selection:
Odocoileus hemionus hemionus, 736
Tamiasciurus hudsonicus, 22
Return rates:
Eptesicus fuscus, 95
Rhabdomys pumilio, 99, 757
Rhodopsin gene sequences, 170
Richardson's ground squirrel, 323
Riparian habitat:
Glaucomys sabrinus, 275
Rodentia:
Akodon (6 spp.), 462
Apodemus sylvaticus, 576
Arvicola terrestris, 655
Blarina (3 spp.), 887
Blarina brevicauda, 606
Blarina carolinensis, 294
Bolomys lasiurus, 677
Cavia magna, 763
Chaetodipus, 366
Chrotomys (5 spp.), 415
Clethrionomys gapperi, 606
Cratogeomys (3 spp.), 1095
Cricetulus triton, 833
Cryptomys hottentotus natalensis, 1
Ctenodactylus gundi, 961
Ctenomys (20 spp.), 170
Cynomys (2 spp.), 15
Cynomys ludovicianus, 524
Dicrostonyx (2 spp.), 380
Dipodomys, 366
Dipodomys (2 spp.), 265
Dipodomys ordii, 1186
Geomys (2 spp.), 750
Gerbillus (2 spp.), 1009
Glaucomys sabrinus, 275
Glaucomys volans, 841
Heteromys, 366, 1085
Lemmus (3 spp.), 380
Liomys, 366
Liomys (5 spp.), 1085
Mastomys huberti, 997
Microdipodops, 366
Microtus (2 spp.), 561, 647, 1144
Microtus ochrogaster, 555
Microtus oeconomus, 953
Microtus pennsylvanicus, 242
Natalus (2 spp.), 1109
Neotoma floridana, 1144
Neotoma micropus, 180
Neusticomys (5 spp.), 873
Octodon (2 spp.), 969
Oligoryzomys longicaudatus, 191
Otomys unisulcatus, 757
Perognathus, 366
Perognathus (3 spp.), 826
Peromyscus (2 spp.), 39, 520, 662, 1144
Peromyscus crinitus, 531
Peromyscus leucopus, 991, 1015
Peromyscus maniculatus, 606
Peromyscus polionotus, 569
Peromyscus slevini, 814
Phenacomys (5 spp.), 201
Phyllotis darwini, 969
Rattus norvegicus, 1042
Reithrodontomys (2 spp.), 1144
Rhabdomys pumilio, 99, 757
Sciurus (2 spp.), 1015
Sciurus aberti, 1220
Sciurus nayaritensis chiricahuae, 947
Sigmodon (8 spp.), 475
Sigmodon hispidus, 46, 670, 1144
Spalacopus cyanus, 302
Spermophilus (3 spp.), 323
Spermophilus parryii, 236, 314
Spermophilus xanthoprymnus, 7
Tamiasciurus hudsonicus, 22, 108, 236
Tamiasciurus hudsonicus grahamensis, 309, 1220
Tamias striatus, 39
Thomomys bottae, 750
variation in species richness by trap height and trap type, 982
Roosevelt elk, 630
Roost site:
Acerodon jubatus, 719
Corynorhinus rafinesquii, 729
Eptesicus fuscus, 729, 1210
Lasiurus borealis, 1210
Lasiurus cinereus, 85
Myotis (4 spp.), 1210
Myotis evotis, 77
Myotis sodalis, 713
Nyctalus (2 spp.), 921
Pipistrellus subflavus, 729, 1210
Pteropus vampyrus lanensis, 719
Root voles, 953
Ruminants:
arctic ungulates, growth in, 121
Rut, in Delphinus delphis, 1247

S
Saccopteryx bilineata, 745
Salvin's spiny pocket mouse, 1085
Sample size, 704
Santa Catalina Island:
Peromyscus slevini, 814
Savannah River Site:
Peromyscus (2 spp.), 662
Peromyscus polionotus, 569
Scat analysis, 704
Scatter-hoarding, by Dipodomys ordii, 1186
Scent:
Saccopteryx bilineata, 745
Sciuridae:
Spermophilus xanthoprymnus, 7
Sciurus:
aberti, 1220
carolinensis, 1015
nayaritensis chiricahuae, 947
niger, 1015
Seal:
New Zealand fur, 1237
northern fur, 1227
Sea lion, Steller, 704, 1075
Seasonality:
Blarina carolinensis, 294
Delphinus delphis, 1247
Didelphis aurita, 287
Erethizon dorsatum, 514
Odocoileus hemionus hemionus, 736
stress axis in male animals, 236
Seasonal variation:
Tadarida brasiliensis mexicana, 599
Tylonycteris (2 spp.), 61
Vulpes velox, 547
Seed predation:
Apodemus sylvaticus, 576
Semelparity, 236
Seral stage habitat:
Setonix brachyurus, 683
Serum blood chemistry, of Ursus americanus, 1171
Setonix brachyurus, 683
Sex differences:
scent organ, 745
Tamiasciurus hudsonicus grahamensis, 309
Sex ratios, in central Appalachian bats, 1210
Sexual dimorphism:
Rattus norvegicus, 1042
Sciurus nayaritensis chiricahuae, 947
Ursus maritimus, 895
Sexual segregation:
Dama dama, 937
Sex variation:
Tylonycteris (2 spp.), 61
Shrew-rats:
Isarog striped, 415
lowland striped, 415
Luzon montane striped, 415
Shrews:
Elliot's short-tailed, 887
northern short-tailed, 606, 887
southern short-tailed, 294, 887
Sigmodon:
cf. minor, 475
chihuahuaensis, 475
curtisi, 475
hispidus, 46, 475, 670, 1144
holocuspis, 475
minor medius, 475
minor minor, 475
oroscoi, 475
Sigmodontinae:
Akodon (6 spp.), 462
Neusticomys (5 spp.), 873
Silver earth rat, 415
Simulations, 704
Skull morphology:
Blarina (3 spp.), 887
Callithrix, 773
Cratogeomys (6 spp.), 1095
Lestodelphys halli, 793

Manis (2 spp.), 1068
Natalus (2 spp.), 1109
Peromyscus slevini, 814
Skunk, striped, 1164
Small mammals:
corridor and olfactory predator cues effect on behavior, 662
eastern red cedar invasion of Great Plains landscape, implications of, 1144
El Niño effects, 689
precocial, 763
trap-capture bias, 606
tree diameter effect on climbing ability, 969
variation in richness by trap height and trap type, 982
Small Sulawesi cuscus, 353
Sminthopsis:
crassicaudata, 242
hirtipes, 689
youngsoni, 689
Snare trapping of Ursus americanus, 1171
Snowshoe hares, 236, 1156
Social structure:
Ctenodactylus gundi, 961
Rhabdomys pumilio, 99
Vulpes velox, 547
Soil condition, pocket gophers and, 750
Sonoma tree vole, 201
Sonoran pronghorn, 782
South Africa:
Lycaon pictus, 255
Otomys unisulcatus, 757
Rhabdomys pumilio, 99, 757
South America:
Akodon philipmyersi, 462
Bolomys lasiurus, 677
Callithrix (6 spp.), 773
Ctenomys (20 spp.), 170
Didelphis aurita, 287
Leontopithecus chrysomelas, 773
Lestodelphys halli, 793
Lutreolina crassicaudata, 902
Neusticomys (5 spp.), 873
Octodon (2 spp.), 969
Oligoryzomys longicaudatus, 191
Phyllotis darwini, 969
Spalacopus cyanus, 302
Sturnira (4 spp.), 866
Thylamys (7 spp.), 147
Thylamys elegans, 969
Xeronycteris vieirai, 403
South Carolina:
Peromyscus (2 spp.), 662
Peromyscus polionotus, 569
Southeast Asia:
Manis (2 spp.), 1068
Phalangeridae, 353
Southeastern beach mouse, 520
Southern flying squirrel, 841
Southern plains woodrat, 180
Southern red-backed voles, 606
Southern right whale, 131
Southern short-tailed shrews, 294, 887
Spacing:
Macrophyllum macrophyllum, 587
Spain:
Apodemus sylvaticus, 576, 1178
Genetta genetta, 1178
Spalacopus cyanus, 302
Spatial activity:
Apodemus sylvaticus, 1178
Spalacopus cyanus, 302
Spatial dynamics:
Mastomys huberti, 997
Spatial ecology:
Vulpes velox, 547
Spatial organization:
Rhabdomys pumilio, 99
Spatial variation:
Peromyscus leucopus, 991
Sigmodon hispidus, 670
Species boundary:
Manis culionensis, 1068
Species richness:
variation in small mammal species richness by trap height and trap type, 982
Spermophilus:
elegans, 323
parryii, 236, 314, 323
richardsonii, 323
xanthoprymnus, 7
Spinifex hopping mouse, 689
Spiny pocket mouse, 1085
Spool-and-line technique, 287
Squirrels:
Abert's, 1220
Anatolian ground, 7
arctic ground, 236, 314
Glaucomys volans, 841
Mexican fox squirrels, 947
Mt. Graham red squirrel, 309, 1220
northern flying, 275
red, 22, 108, 236
tassel-eared, 1220
tree, 1015
Sry gene, 160
Stable isotope studies:
Rangifer tarandus, 610
Steller sea lions, 704, 1075
Stephen's kangaroo rats, 265
Stock structure:
Eumetopias jubatus, 1075
Stress in free-ranging mammals:
adaptive role in male mammals, 236
coping with capricious environment, 248
dominance, aggression, and glucocorticoid levels in social carnivores, 255
physiology, ecology, and natural history, 225
Strigocucus celebensis, 353
Striped mouse, 757
Striped skunk, 1164
Sturnira:
erythromos, 866
hondurensis, 866
ludovici, 866
sorianoi, 866
Subterranean mammals:
Ctenomys (20 spp.), 170
Geomys (2 spp.), 750
Spalacopus cyanus, 302
Thomomys bottae, 750
Sulawesi bear cuscus, 353
Sunda pangolin, 1068
Supplemental habitat use, 630
Survival:
Blarina carolinensis, 294
Dipodomys (2 spp.), 265
Eptesicus fuscus, 95
Mephitis mephitis, 1164
Tamiasciurus hudsonicus, 22
Ursus americanus, 1022, 1029
Swift fox, 547
Swimming:
Lutreolina crassicaudata, 902
Sympatry:
Microtus (2 spp.), 561, 647
Systematics:
Blarina (3 spp.), 887
Cratogeomys (3 spp.), 1095
Hyladelphys, 853
Perognathus (3 spp.), 826
Peromycus leucopus, 803
Phalangeridae, 353
Xeronycteris vieirai, 403

T
Tadarida:
brasiliensis, 67, 1193
brasiliensis mexicana, 599
Tallgrass prairie:
eastern red cedar invasion of Great Plains landscape and effect on small mammals, 1144
Sigmodon hispidus, 670
Tamiasciurus:
hudsonicus, 22, 108, 236
hudsonicus grahamensis, 309
Tamias striatus, 39
Taphonomy:
Spermophilus (3 spp.), 323
Tassel-eared squirrel, 1220
Taxonomy:
Akodon (6 spp.), 462
Cratogeomys (3 spp.), 1095
Manis culionensis, 1068
Peromyscus slevini, 814
Phalangeridae, 353
Phenacomys (5 spp.), 201
Telemetry. *See* Radiotelemetry
Temporal patterns:
Apodemus sylvaticus, 1178
in Australian bats, 909
Ursus americanus, 1029
Temporal variation:
Sigmodon hispidus, 670
Tent-making, 281
Territoriality:
Arvicola terrestris, 655
drifting, 655
Melonycteris melanops, 931
Territory quality:
Tamiasciurus hudsonicus, 108
Texas:
Blarina (3 spp.), 887
Neotoma micropus, 180
Odocoileus virginianus, 56
Thailand:
Catopuma temminckii, 29
Neofelis nebulosa, 29
Pardofelis marmorata, 29
Thermoregulation:
Spermophilus parryii, 314
Thick-tailed opossum, 902
Thomomys bottae, 750
Thylamys:
cinderella, 147
elegans, 147, 969
macrurus, 147
pallidior, 147
sponsorius, 147
tatei, 147
venustus, 147
Thyroid secretion, 121
Tibet:
Pantholops hodgsonii, 881
Tibetan antelope, 881
Time budget:
Sciurus nayaritensis chiricahuae, 947
Tooth eruption:
Monodelphis domestica, 333
Tooth replacement:
Monodelphis domestica, 333
Tooth wear:
Spermophilus (3 spp.), 323

Top-down effects, 689
Topology effects:
on Sigmodon hispidus, 670
Torpor:
Cynomys (2 spp.), 15
Track plates, 991
Trap. *See* Livetrapping
Trap odor, 606
Tree squirrels, 1015
Tuco-tucos, 170
Tunisia:
Ctenodactylus gundi, 961
Turkey:
Spermophilus xanthoprymnus, 7
Tursiops aduncus, 541
Tylonycteris:
pachypus, 61
robustula, 61

U
United Kingdom:
Arvicola terrestris, 655
United States:
Antilocapra americana sonoriensis, 782
Balaena mysticetus, 342
Blarina (3 spp.), 887
Blarina carolinensis, 294
Bretzia, 115
Callorhinus ursinus, 1227
Canis latrans, 1036
Canis lupus, 255
Cervus elaphus roosevelti, 630
Corynorhinus rafinesquii, 729
Corynorhinus townsendii ingens, 1136
Cynomys (2 spp.), 15
Dipodomys (2 spp.), 265
Dipodomys ordii, 1186
eastern red cedar invasion of Great Plains landscape and effect on small mammals, 1144
Eptesicus fuscus, 95, 729, 1210
Eumetopias jubatus, 1075
Geomys (2 spp.), 750
Glaucomys sabrinus, 275
Lasiurus borealis, 1210
Mephitis mephitis, 1164
Microtus (2 spp.), 561
Microtus ochrogaster, 555
Myotis (4 spp.), 1210
Myotis evotis, 77
Myotis sodalis, 713
Neotoma micropus, 180
Ochotona princeps, 974
Odocoileus virginianus, 56, 1015
Perognathus (3 spp.), 826
Peromyscus (2 spp.), 39, 520, 662
Peromyscus crinitus, 531
Peromyscus leucopus, 803, 991, 1015
Peromyscus polionotus, 569
Phenacomys (5 spp.), 201
Pipistrellus subflavus, 729, 1210
Rangifer tarandus, 506
Sciurus (2 spp.), 1015
Sciurus aberti, 1220
Sciurus nayaritensis chiricahuae, 947
Sigmodon (8 spp.), 475
Sigmodon hispidus, 46, 670
Tadarida brasiliensis mexicana, 599
Tamiasciurus hudsonicus, 22
Tamiasciurus hudsonicus grahamensis, 309
Tamias striatus, 39
Thomomys bottae, 750
Ursus americanus, 1022, 1029, 1171
Vulpes velox, 547
Urban development/urbanization:
Cynomys ludovicianus, 524
Mephitis mephitis, 1164
Myotis sodalis, 713
use of spatial features by foraging insectivorous bats, 1193
Ursus:
americanus, 160, 1022, 1029, 1171
arctos, 160
maritimus, 160, 895
Utah:
Peromyscus crinitus, 531
Utah prairie dogs, 15

V
Vegetation:
centrifugal gerbil community organization, 1009
eastern red cedar invasion of Great Plains landscape and effect on small mammals, 1144
pocket gophers and, 750
Venezuela:
Sturnira (4 spp.), 866
Vermivory:
Chrotomys (5 spp.), 415
Vimentin gene sequences, 170
Vocalization:
alarm calls of Ochotona princeps, 974
Cynomys ludovicianus, 524
Voles:
heather, 201
meadow, 236, 561, 647
prairie, 555, 561, 647, 1144
red tree, 201
root, 953
Sonoma tree, 201
southern red-backed, 606
water, 655
white-footed, 201
woodland, 1144
Vulpes velox, 547

W
Washington:
Myotis evotis, 77
Water vole, 655
Weaning:
Rattus norvegicus, 1042
Weather effects:
El Niño effects in central Australia, 689
on Rangifer tarandus, 506
on Sigmodon hispidus, 670
temporal patterns in Australian bats, 909
wind effect on Ochotona princeps, 974
Weight. *See also* Body mass
Erethizon dorsatum, 514
Whales:
Balaena mysticetus, 342
balaenopterids, 139
Eubalaena australis, 131
Whistles, by Tursiops aduncus, 541
White-footed mouse, 39, 803, 991, 1015, 1144
White-footed vole, 201
White-tailed deer, 56, 623, 1015
Wind effect on pika behavior, 974
Winter survival:
adaptation of stress axis in male animals, 236
Wolf, 255
Wolverine, 386
Wongai ningaui, 689
Woodland caribou, 495
Woodland vole, 1144
Wood mouse, 1178
Woodrat:
eastern, 1144
southern plains, 180
Wyoming ground squirrel, 323

X
Xeronycteris vieirai, 403

Y
Y chromosome, 160
Yellow-shouldered bats, 866
Yellowstone National Park:
Canis lupus, 255